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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/424,661	11/29/1999	TATSUYA MITSUGI	1163-258P	8311

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[REDACTED] EXAMINER

ALI, MOHAMMAD

ART UNIT	PAPER NUMBER
2177	

DATE MAILED: 02/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

NM

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/424,661	MITSUGI, TATSUYA	
	Examiner Mohammad Ali	Art Unit 2177	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 25 January 2002.  
 2a) This action is FINAL.                  2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-3 and 5-7 is/are pending in the application.  
 4a) Of the above claim(s) ~~is~~/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-3 and 5-7 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.  
 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.  
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.  
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                     | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                 | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Arguments*

1. This office action is in response to the Amendment filed on January 25, 2002 Paper No. 6.
2. Claims 1-3 and 5-7 are pending in this Office Action. Claims 3 and 5 have been amended, claim 4 have been cancelled and 6-7 have been added as a new.
3. After a further search and a through examination of the present application, claims 1-3 and 5-7 are remain rejected.
4. Applicant's arguments filed on January 25, 2002 with respect to claims 1-3 and 5-7 have been fully considered but they are not deemed to be persuasive.
5. The arguments of the response are largely to the limitation of "storing object data in association with a plurality of attribute words categorized according to the sentence elements of a natural language and searching the database using each of the search words respectively associated with the sentence element categories, and retrieving the object data associated with the attribute words that match a single search word or a plurality of search words" and Paik et al. ("Paik") teaches the claimed invention.
6. In response to the applicant's arguments, "storing object data in association with a plurality of attribute words categorized according to the sentence elements of a natural language". In Paik, The KR database provides a data organization structure for storing and retrieving CRCs. This can be provided by using any of several traditional database schemes: a COTS relational database or an object oriented database (OODB). The first requirement is that the system allow the incremental addition of KR Units to the database (col. 21 lines 22-27). If a relative clause modifies a proper name, it is possible to identify relations between the proper name and the constituents of the relative clause via a method called the Relation Revealing Formula (RRF) The RRF is a sublanguage approach (Sager et al, 1987) to analyzing texts. Sublanguage theory suggests that any type of text that is used for a common purpose within a group of individuals will develop characteristic syntax and semantics. A set of relative clauses, which modify one type of

proper name, is assumed to constitute one sublanguage. Thus, for each sublanguage, it is possible to construct specific relation extraction rules based on: 1) typical attributes of a particular proper name category and 2) case frames, which are usually associated with the matrix verbs of sentences,...(col. 16 lines 15-44, Fig. 11).

7. In response to the applicant's arguments, "searching the database using each of the search words respectively associated with the sentence element categories, and retrieving the object data associated with the attribute words that match a single search word or a plurality of search words". In Paik, perusing lists of documents in search of a specific fact can be time consuming, however,... (col. 5 lines 30-43) A unit of text which is selected for analysis, and to include an entire document, or any portion thereof, such as a title, an abstract, or one or more clauses, sentences, or paragraphs. A document will typically be a member of a document database referred to as a corpus, containing a large number of documents. Such a corpus can contain documents in any or all of the plurality of supported languages,... (col. 5 lines 50 to col. 6 lines 24).

#### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
9. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,076,088 issued to Paik et al. ("Paik").
10. With respect to claim 1, Paik teaches, a database for storing,..., natural language (col. 3 lines 49-58);

an input unit,..., natural language (col. 5 lines 60-65, col. 3 lines 37-48);  
a criterion retrieval unit,..., natural language (col. 8 lines 20-42);  
an object retrieval unit for searching,..., search words (col. 8 lines 20-42, col. 22 lines 14-44);

- an output apparatus,..., retrieved (col. 8 lines 9-18).
11. As per claim 2, database stores,..., object of action category (col. 13 lines 42-55).
  12. With respect to claim 3, Paik teaches, retrieving one or a plurality,..., natural language (col.8 lines 20-42);  
conducting a search,..., search words (col. 8 lines 20-42, col. 22 lines 14-44);  
retrieving the object data,..., retrieved (col. 8 lines 9-42); and  
using at least a search word,...(col. 5 lines 30 to col. 6 lines 47).
  13. With respect to claim 5, Paik teaches, a computer readable-medium recording medium  
storing,...(col. 3 lines 1 to col. 4 lines 19).
  14. As per claims 6 and 7, same as claims arguments above and Paik teaches, plurality of tuples  
retrieved in a search,...(col. 28 lines 55-67, col. 32 lines 50-54, Abstract).

### ***Conclusion***

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Contact Information***

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Ali whose telephone number is (703) 605-4356. The examiner can normally be reached on Monday thru Thursday from 7:30am-5:30 pm (EST).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (703) 305-9790. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

Mohammad Ali

Patent Examiner

February 4, 2002



JOHN BREENE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100